

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for treating cancer, comprising administering to a patient that has cancer a protein that comprises a receptor-antagonizing domain and a positive immunomodulator domain, wherein the receptor-antagonizing domain is a prolactin-antagonist domain and the positive immunomodulator domain is a cytokine.
2. (Canceled)
3. (Previously Presented) The method according to claim 1, wherein the positive immunomodulator domain is an interleukin.
4. (Previously Presented) The method according to claim 3, wherein the interleukin is an IL-2.
5. (Previously Presented) The method according to claim 3, wherein the positive immunomodulator domain is an IL-12.
6. (Previously Presented) The method according to claim 3, wherein the positive immunomodulator domain IFN γ .
- 7.-21. (Canceled)
22. (Previously Presented) The method according to claim 1, wherein cells of the cancer overexpress a prolactin receptor at levels greater than in normal, healthy cells.
- 23.-27 (Canceled)
28. (Previously Presented) A method for inducing an immune response in an individual that has cancerous cells, comprising administering to said individual a protein comprising (i) a prolactin-antagonist domain and (ii) an immunomodulatory domain, wherein said immunomodulatory domain is a cytokine.

29. (Previously Presented) The method of claim 28, wherein said prolactin-antagonist domain comprises a protein consisting essentially of the amino acid sequence of SEQ ID NO. 1.

30.-32. (Canceled)

33. (Previously Presented) The method of claim 28, wherein said prolactin-antagonist domain comprises a protein consisting essentially of the amino acid sequence of SEQ ID NO. 1, wherein the amino acid at position 129 of SEQ ID NO. 1 is not glycine.

34. (Previously Presented) The method of claim 28, wherein the amino acid at position 129 of SEQ ID NO. 1 is arginine.

35. (Previously Presented) The method of claim 28, wherein said cancerous cells express prolactin receptors at a level greater than that of normal, healthy cells.

36. (Previously Presented) The method of claim 28, wherein said immunomodulatory domain is selected from the group consisting of IL-2, IL-12, and IFN γ .

37. (Previously Presented) The method of claim 28, wherein said immunomodulatory domain is IL-2.

38. (Previously Presented) The method of claim 28, wherein said immunomodulatory domain is IL-12.

39. (Previously Presented) The method of claim 28, wherein said immunomodulatory domain is IFN γ .

40.-44. (Canceled)

45. (Currently Amended) ~~The method of claim 40~~ A method for inducing an immune response in an individual that has cancerous cells, comprising administering to said individual a protein comprising (i) a domain that binds to a receptor expressed on a cancer cell altering the function of said receptor, and (ii) another domain that elicits an immune

response that is targeted to said cancer cell, wherein the domain that binds to a receptor expressed on a cancer cell is a prolactin antagonist domain.

46. (Previously Presented) The method of claim 45, wherein the prolactin-antagonist domain has an arginine at position 129 of the prolactin protein.

47. (Previously Presented) The method of claim 46, wherein the prolactin-antagonist domain comprises a protein comprising the amino acid sequence of SEQ ID NO. 1.

48.-50. (Canceled)

51. (Currently Amended) ~~The method according to claim 50~~ A method for treating cancer, comprising administering to a patient that has cancer a protein that comprises a receptor-antagonizing domain and a positive immunomodulator domain, wherein the receptor-antagonizing domain is a growth hormone antagonist domain, and wherein the positive immunomodulator domain is an interleukin.

52. (Currently Amended) The method according to claim ~~50~~51, wherein the interleukin is an IL-2.

53. (Currently Amended) The method according to claim ~~50~~51, wherein the positive immunomodulator domain is an IL-12.

54. (Currently Amended) The method according to claim ~~50~~51, wherein the positive immunomodulator domain IFN γ .

55. (Canceled)

56. (Currently Amended) The method of claim ~~50~~51, wherein the growth hormone antagonist domain has an amino acid substitution at position 120 of the human growth hormone protein.

57. (Canceled)

58. – 60. (Not Entered)